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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/646,347

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Marilyn E. Karaman

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EXAMINER

CINTINS, IVARS C

ART UNIT

PAPER NUMBER

1724

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

12/28/2006

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/646,347

Applicant(s)

KARAMAN ET AL.

Examiner

Ivars C. Cintins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,8 and 27-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 8 and 27-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-5, 8 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mehkeri et al. (U.S. Patent No. 5,512,491; hereinafter "Mehkeri") in view of Applicant's admitted prior art. Mehkeri discloses removing *Cryptosporidium* (col. 11, line 11) from water with a particulate medium having surface hydrated active hydroxyl groups (col. 3, lines 14-15). This reference also teaches using alumina as a base material (col. 3, line 11), and the surface hydrated active hydroxyl groups in this alumina will contain surface Al-OH groups. Accordingly, Mehkeri et al. discloses the claimed invention with the exception of the particle size of the alumina, and the exact surface density of Al-OH groups on this alumina (claims 3-5 and 27-29). Applicant has admitted that "alumina is readily available in different diameter size ranges for example, from about 15mm down to about 50 microns" (see page 5, lines 7-8 of the specification). Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ alumina having a particle size between 0.5 mm and 1.5 mm in the process of Mehkeri, since alumina having this particle size is "readily available." Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ alumina having the recited surface density of Al-OH groups in the reference process, in order to maximize the active hydroxyl groups on this alumina surface.

Applicant's arguments filed October 10, 2006 have been noted and carefully considered but are not deemed to be persuasive of patentability. Applicant argues that Mehkeri does not disclose utilizing alumina having the recited particle size, and has submitted declarations, under 37 C.F.R. § 1.132, in an attempt to demonstrate new and unexpected results for this particle size. While the showing contained in the Bustamante declarations does appear to demonstrate new and unexpected results for the removal of *Cryptosporidium* from water with alumina having a particle size between 0.5 and 1 mm, this showing is not deemed to be persuasive of patentability for claims 1, 3-5, 8 and 27-29 of this application for the following reasons:

(1) This showing is not deemed to be commensurate in scope with the claims currently pending in this application because these claims read on alumina having a larger particle size (i.e. up to 1.5 mm). Furthermore, claims 27 and 28 are not even limited to the removal of *Cryptosporidium*. It is well established that the evidence relied on to establish unobviousness must be commensurate in scope with the claimed subject matter. See *In re Kerkhoven*, 626 F.2d. 846, 851, 205 USPQ 1069, 1072-1073 (CCPA 1980) and *IN re Clemens*, 622 F.2d 1029, 1035, 206 USPQ 289, 296 (CCPA 1980).

(2) The unexpected property associated with alumina particles having a particle size between 0.5 and 1 mm has not been disclosed in the application originally filed. In fact, Applicant has apparently disclosed that alumina having a particle size of 0.5 mm will produce the same results as alumina with a particle size of 2 mm (see page 6, line 2

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of the specification). Accordingly, the above noted declarations cannot be relied upon to establish unexpected results. See *In re Davies et al.*, 177 USPQ 381 (CCPA 1973).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is 571-272-1155.

The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Duane Smith, can be reached at 571-272-1166.

The centralized facsimile number for the USPTO is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ivars C. Cintins
Primary Examiner
Art Unit 1724

I. Cintins
December 23, 2006